

MAJOR SUBDIVISION
APPLICATION REVIEW CHECKLIST
PLANNING BOARD
CHESTERFIELD, NH

Subdivision Name 5 Lot Cluster Subdivision

Property Location 271 Rte 9A Spofford NH

Map 5K
5N

Lot(s) B3, B3-1
B9, B1, B2

This checklist is to be completed by the applicant and submitted with the application

Documents for Complete Application

Complete

Comments

- | | | |
|---|------------------|----------------|
| 1. Application form (sig. & notarized author. if appl) | ✓ | |
| 2. Fees paid (Appendix B) | ✓ | |
| 3. Abutter List/Cards/Labels (404.2 B) | ✓ | |
| 4. Inspection permission (404.2 C) | ✓ | |
| 5. Drafting standards Per 401 – Land Development Regs. | ✓ | |
| Plat prints (*5 paper & 2 mylars w/final) (404.2D) | ✓ | |
| Signature block (large enough for 7 signatures) | ✓ | |
| Certification statements (404.2 D #4, 10, 11) | ✓ | |
| Verify that all affected parcels (new & existing) | | |
| are clearly identified and lot numbering is accurate | ✓ | |
| 6. Deeds, easements covenants to Town (404.2E) (if req.) | N/A | |
| 7. List of required Federal, State & Local Permits (404.5F) | | |
| • <u>NH DOT Driveway Permit</u> | Pending ✓ | Approved _____ |
| • <u>AOT Permit</u> | Pending ✓ | Approved _____ |
| • <u>NHDES Sewer Permit</u> | Pending ✓ | Approved _____ |
| 8. Waiver requests Drainage Report | Yes | |
| 9. Topographic plan (404.4A) | ✓ | |
| 10. NH Dept. of Environmental Svcs. (DES) (404.4B) | ✓ | |
| <u>Major Subdivision continuation (404.5):</u> | | |
| 11. Final Street and Utilities Plan (404.5A) | ✓ | |
| 12. Final Surface water drainage plan (404.5B) | ✓ | |
| 13. Hydrological analysis (404.5C) | Waiver requested | |
| 14. Erosion and sediment control plan (404.5D) | | |
| Site Plan Map (incl. on-site disposal) | ✓ | |
| Narrative Information | ✓ | |
| 15. Site impact analysis *Narrative (404.5E) | | ✓ |
| 16. Engineer's construction cost estimate (404.5F) | N/A | |
| 17. Fire/police department review (if required by PB) | — | |
| 18. Town Engineer's review (if required by PB) | — | |
| 19. Road bond filed (prior to final approval) | N/A | |
| 20. Estimate of fill/gravel to be excavated or imported | — | |

Planning Board Issues/Questions

Answered

Comments

- | | |
|--|---|
| • Determination of Regional Impact | — |
| • In accordance with Master Plan | — |
| • ZBA requirements (file ZBA app. prior to Pl. Bd. app.) | — |
| Zoning Board approval needed prior to approval | — |
| • Conservation Commission input to | — |
| Wetlands impact | — |

(This page is provided to applicants as a guide for completing applications. Sub-Division application requirements include but are not limited to these items.)

NOTICE TO ALL APPLICANTS: Please be advised that Public Service of New Hampshire (PSNH) has obtained and recorded rights and easements to construct, repair, operate, patrol and remove electrical lines. Many of these easements include the right to remove all structures or obstructions found within the transmission strip. Consequently it is important that current landowners realize PSNH's rights when developing land adjacent to transmission lines. Please note that a packet of information from PSNH is available for review in the Selectmen's office along with Planning Board Applications. Copies are available for a fee of 50 cents per page from the Selectmen's Secretary. The packet advises all parties submitting subdivision plans, site plans, etc., involving their easements, of PSNH's interest in reviewing these plans, and requests parties to forward copies of the plans or to contact Celine Bilodeau at 634-3200.

APPLICATION FOR SUBDIVISIONS

To: Town of Chesterfield Planning Board

For Office Use Only:

Date Filed: _____

Application Received By: _____

Amount Paid: _____

INCOMPLETE OR INACCURATE APPLICATIONS SHALL BE REFUSED

All information must be submitted to the Selectmen's Office with the application. **IT IS THE RESPONSIBILITY OF THE APPLICANT TO ENSURE THAT ALL OF THE REQUIRED INFORMATION IS ACCURATE AND COMPLETE.** The Planning Board has the right to require additional information necessary to make a decision at any time during this process.

Selectmen Office Hours are Monday – Thursday, 8:00 AM – 4:00 PM and Friday 9AM – 12PM

Public Hearings are held the **FIRST and THIRD MONDAYS of the month** at 7:30 PM at the Selectmen's Office unless otherwise posted.

PLEASE PRINT OR TYPE

Name of Applicant* Nine A LLC

Mailing Address 135 South Road Farmington CT 06032

Location of Proposal 271 Rte 9A Spofford NH TMP 5K-B3, 5K-B3.1, 5N-B9, 5N-B1, 5N-B2
(Street, Subdivision, Tax Map #)

Daytime Phone # c/o 603-357-0116 Evening Phone # _____

Owner's Name Same as above

Mailing Address _____

*Anyone other than the property owner representing the property **MUST HAVE** Power of Attorney or a STATEMENT from the property owner.

SUBDIVISION APPLICATION

Please check which applies, NOTE: See Land Development Regulations for definition

Is this a _____ Preliminary Application OR a ☒ Final Application

For a _____ Minor Site Subdivision OR a ☒ Major Subdivision

Number of Lots: 7

Applications are due at least twenty-one (21) days prior to a regular meeting

ZONING DISTRICT

Please check all that apply:

- ☒ Residential & Spofford Lake District
☐ Rural / Agricultural
☐ Village
☐ Commercial / Industrial
☐ Office / Retail / Services

Estimated acreage for each zone that applies:

10.97 acres Spofford Lake : 95.28 Residential Zone
____ acres
____ acres
____ acres
____ acres

Are any waivers being requested from the Board? Yes

If yes which waivers? Drainage Report

LIST OF ABUTTERS*

*An abutter is any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration, or who owns land within 200 feet of the boundaries of the land under consideration.

See Attached

- 1) The name and address of the firm and/or persons whose stamp is present on the plan.

Name: _____

Mailing Address: _____

- 2) List all Property Abutters, refer to definition listed above: (Attach additional sheet if needed)

Name: _____

Name: _____

Mailing Address _____

Mailing Address: _____

Map & Lot # _____

Map & Lot # _____

Name: _____

Name: _____

Mailing Address _____

Mailing Address: _____

Map & Lot # _____

Map & Lot # _____

Name: _____

Name: _____

Mailing Address _____

Mailing Address: _____

ABUTTERS TO 5K B3, 5K B3.1, 5N B9, 5N B1, 5N B2

5K B3, 5K B3.1, 5N B9, 5N B1, 5N B2
Nine A LLC
135 South Road
Farmington CT 06032

5L A4A
Susan C Howard
304 Upper Rd
W Deerfield MA 01342

5L A4B
Thomas Clark
312 Upper RD
W Deerfield MA 01342

5L A4C
Frederick Clark
84 Burnham Rd
Greenfield MA 01301

5N B2.1
Eaton Revocable Trust of 1991
Thomas R Eaton Trustee
27 Pheasant Hill Road
Keene NH 03431

5K B4, 5K B6
Linda Thomas 2004 Living Trust
283 Route 9A
Spofford NH 03462

5K B8, 5N B9.1
Pine Grove Springs Country Club
PO Box 56
Spofford NH 03462

5N B4, 5N B5
Harris Revocable Trust
Sandra K Harris Trustee
PO Box 516
Spofford NH 03462

5N B7
Joan Cook
88 Route 9A
Spofford NH 03462-4108

5L A3
Ronald Coburn
163 Route 9A
Spofford NH 03462

11B A13
D-L-C Spofford LLC
PO Box 200
Spofford NH 03462

Brickstone Land Use Consultants
185 Winchester Street
Keene NH 03431

11B A17
Jeffrey A Foster
Lisa M Sillanpaa
11 Maple Road
Spofford NH 03462

5K B1
Jay & Mary L Jenkins
944 Champney
St Simonds Island GA 31522

5K B5
Elizabeth A Guzofski Trust
Elizabeth A Guzofski Trustee
70 Breezy Hill Road
South Windsor CT 06074

5N B6
Galasso Living Trust
Joseph L & Pamela Galasso Trustees
421 Tomoko Dr
Englewood FL 34223

5M A10
c/o Anthony Martini
PO Box 130
Spofford NH 03462

5L A2
Lynn E Clair Trust
Lynn Clair Trustee
9038 Shenendoah Circle
Naples FL 34113

5M A 11
Town of Chesterfield
PO Box 175
Chesterfield NH 03443

5L A1
East Wood Properties LLC
43 Daniels Hill Road
Keene NH 03431

5L A13
Edward Simon Jones
241 Route 9A
Spofford NH 03462

5L A14
William F & Suzanne M Accorsi
120 Maplewood Terrace
Springfield MA 01108

5L A15
Douglas R & Mary Jayne Dreyer
176 Dover Road
Manhasset NY 11030

William C Saturley
Preti Flaherty, Beliveau &
Pachios, Chartered LLP
PO Box 1318
Concord NH 03302-1318
SVE Associates
PO Box 1818
Brattleboro VT 05302-1818

5M A7, 11B A-14
Anthony & Marisa Martini
PO Box 130
Spofford NH 03462

David A Mann Survey
3 Greenbriar Road
Keene NH 03431

5M
Lake Spofford Family Rec
c/o Lauren Nelson
PO Box 536
Spofford NH 03462

Map & Lot # _____

Name: _____

Mailing Address _____

Map & Lot # _____

Name: _____

Mailing Address _____

Map & Lot # _____

Name: _____

Mailing Address _____

Map & Lot # _____

Name: _____

Mailing Address _____

Map & Lot # _____

Name: _____

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Map & Lot # _____

Name: _____

Mailing Address: _____

Map & Lot # _____

Name: _____

Mailing Address: _____

Map & Lot # _____

Name: _____

Mailing Address: _____

Map & Lot # _____

Name: _____

Mailing Address: _____

Map & Lot # _____

Applicant has read and completed the application accurately to the best of his/her knowledge.

Signature: _____

Date: _____

12-31-19



PLANNING BOARD
TELEPHONE (603) 363-4624



**TOWN OF CHESTERFIELD
PLANNING BOARD
ABUTTER NOTIFICATION
APPLICANT ACKNOWLEDGEMENT**

All applications requiring a public hearing must include a \$9.00 Notification Fee and updated address for each of the following: the applicant, abutters (*see parameters below*), all professionals whose seal appears on any plat submitted to the Board as defined in RSA 676:4, I (d) [every engineer, architect, land surveyor, or soil scientist], holders of conservation, preservation or agricultural preservation restrictions, and other persons with direct interest as indicated by applicant by way of inclusion on the abutter list (including authorized agents/representatives).

ABUTTER: *Any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the Planning Board or who owns land within 200 feet of the boundaries of the land under consideration. For purpose of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration.*

LIST OF ABUTTERS:

Under the requirements of RSA 676:4, I (b) an applicant must submit the names and mailing addresses of the applicant and all abutters to the property under consideration. **The names of the abutters must be taken from the municipal records not more than five days before the date on which the application is filed.** Please note that the applicant is solely responsible for providing a complete and accurate list of abutters. Any abutter whose contact information was reasonably available from Town records 5 days prior to submission of the application, and whose name and address were not accurately included on the abutter list for notification, may have a right to appeal any decision by the Planning Board. Abutter information is available for research in the Selectmen's office.

The undersigned acknowledges and affirms that they have the legal right to file an application with the Planning Board as the landowner(s)/trustee(s) or appointed agent acting on behalf of the landowners; and avows that a complete abutters list has been provided and has been updated a minimum of five (5) days prior to submission of the application.

James P Phippard / Agent

Printed Name

Signature

12/31/19

Date

Printed Name

Signature

Date



PLANNING BOARD
TELEPHONE (603) 383-4824



**TOWN OF CHESTERFIELD
PLANNING BOARD
DESIGNATION OF AUTHORIZED REPRESENTATIVE**

I/We, Nine A LLC (and) _____, as land-
owner(s) and/or trustee(s) of the land listed below:

Location of Land: Rte 9A Spofford

Map: 5K **Lot:** B-3, B-3.1

Map: 5N **Lot:** B-9, B-1, B-2

authorize the following individuals:

<u>James P Phippard</u> (Name)	<u>Brickstone Land Use Consultants LLC</u> (Company Name)	<u>Sole Member</u> (Capacity)
_____ (Name)	_____ (Company Name)	_____ (Capacity)
_____ (Name)	_____ (Company Name)	_____ (Capacity)

to act as agent(s) on my/our behalf in matters related to the Cluster Subdivision
application submitted on 12/31/2019 (date) (type)

<u>Valerie Santilli</u> Printed Name	<u></u> Signature	<u>12/31/19</u> Date
_____ Printed Name	_____ Signature	<u> / / </u> Date

Please list any agents, architects, engineers or other individuals that you may wish the Planning Board to contact directly in reference to your application, will present or conduct business on your behalf, or has affixed his/her seal to any technical or engineered drawings. *Be advised that any licensed surveyor or engineer affixing his/her seal to any submission must be included on the "Abutter List" to receive notification of public meetings or public hearings.



**TOWN OF CHESTERFIELD
PLANNING BOARD
PERMISSION FOR SITE VISIT**


**This document must be signed by all land-owners as listed on the deed(s)*

I/We, Nine A LLC (and) _____, as land-owner(s) and/or trustee(s) of the land listed below, authorize the members of the Town of Chesterfield Planning Board, its agents and assigns to enter the premises for purposes of site review in conjunction with the Cluster Subdivision application submitted on 12/31/2019 I/We further acknowledge that any site visit attended by a quorum of the Planning Board constitutes a public meeting. Any such meeting shall be noticed and open to the non-board public. I/We authorize public access to the site under such circumstances where an on-site meeting is called for by the Planning Board.

Location of Land: Rte 9A Spofford

Map: 5K **Lot:** B-3, B-3.1

Map: 5N **Lot:** B-9, B-1, B-2

<u>Valerie Santilli</u>		<u>12/31/19</u>
Printed Name	Signature	Date
_____	_____	<u> / / </u>
Printed Name	Signature	Date

Additional copies available upon request.

There must be one signature for each owner/trustee listed on the deed(s).

Application is subject to "Denial Without Prejudice" if signed form does not accompany the application.

PLANNING BOARD FEE SCHEDULE

Conceptual Consultations: - No Fee

Voluntary Notice of Merger: - There is no fee payable to the Town of Chesterfield; however, a check made payable to the Cheshire County Registry of Deeds must accompany submission of Notice. Documents and confirmation of Registry fees available from the Town Office.

***ADDITIONAL SURCHARGE – A \$25.00 CHECK MADE PAYABLE TO: “CHESHIRE COUNTY REGISTRY OF DEEDS” (with a note indicating “LCHIP FEE”) MUST BE COLLECTED FOR ALL DOCUMENTS & PLANS TO BE FILED AT THE CHESHIRE COUNTY REGISTRY OF DEEDS (particularly Subdivisions & Boundary Line Adjustments):**

Subdivisions:

Boundary Line Adjustment	\$75 <i>*plus Registry Surcharge</i>
Minor Subdivisions (3 or fewer lots with no proposed road, final or preliminary)	\$50 per lot <i>*plus Surcharge</i>
Major Subdivisions – Preliminary Applications	\$150 <i>*plus Registry Surcharge</i>
Major Subdivisions – Final Applications	\$100 + \$25 per lot or unit <i>*plus Registry Surcharge</i>
Condominium Conversions	\$100 + \$25 per unit <i>*plus Registry Surcharge</i>

Site Development (Site Plan) \$100 + \$5 per 1,000 sq. ft. of land coverage

Technical Review of Plans: Applicant must reimburse Town for Consultant's costs for review of applications prior to recording of plat or signing of Site Plan per RSA 676:4 I

Re-hearings, Re-notification and Advertising \$50 + \$9 per abutter

Certified Notification *\$9 each

***All Subdivision and Site Development applications must include a \$9 Notification Fee and updated address for each of the following** (addresses must be verified by the applicant not more than 5 days before filing): the applicant, abutters (see parameters below), all professionals whose seal appears on any plat submitted to the Board as defined in RSA 676:4, I (d) [every engineer, architect, land surveyor, or soil scientist], holders of conservation, preservation or agricultural preservation restrictions, and other persons with direct interest as indicated by applicant by way of inclusion on the abutter list (including authorized agents/representatives).

ABUTTER: Any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the Planning Board or who owns land within 200 feet of the boundaries of the land under consideration. For purpose of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration.

****Additional Notification Fees will be necessary for re-hearings, etc.**

DIRECTION FOR NOTICE OF DECISION: Please check boxes to indicate applicants' wishes.

- ☒ A complimentary notice will be sent to the applicant only by first class U. S. Postal mail service. Note that the applicant is/are the landowner(s). (Standard practice unless otherwise directed below.)
- ☐ Applicant wishes to receive a copy of the notice of decision by certified mail; \$10.00 fee included.
- ☐ Applicant wishes to additional copies of the notice of decision to be sent by certified mail to the following individuals (\$10.00 fee per individual also included). List Names/Addresses below:

_____	_____	_____
_____	_____	_____
_____	_____	_____

SVE Associates

Engineering * Surveying * Landscape Architecture * Planning

December 30, 2019

Chesterfield Planning Board
Town of Chesterfield
490 Route 63
P.O. Box 175
Chesterfield, NH 03443

Re: Nine A, LLC Site Plan Application – Route 9A, TMP 5K-B-3

Dear Members of the Board:

On behalf of the applicant, Nine A, LLC, we respectfully request a waiver of full compliance with Development Standard 404.5 (B) & (C), specifically the submission of formal stormwater drainage calculations. Our application is seeking approval to remove the existing building known as "Spofford Hall", and associated pavement and construct a private road for a 5-lot cluster subdivision. There will be a net decrease in impervious surfaces of over 70,000 sf, when the private road is constructed, and assuming each new house lot is developed to the maximum lot coverage of 20% allowed in the Spofford Lake District.

We propose to demolish the existing Spofford Hall, along with the existing sidewalks and parking lot. The existing sewer treatment building and parking lot across the street will also be removed. The only impervious surface to remain is the existing roadway up to the leachfields. Areas that are to be disturbed by demolition will be loamed, seeded & stabilized to prevent erosion.

We think the reduction of impervious surface by approximately 55% meets the spirit and intent of the regulations. This project will be significantly reducing the amount of impervious surface and hence stormwater runoff to the lake so we see no adverse impacts to the abutters, community or environment, and no diminution of abutting property values. Creating a professionally prepared hydrologic analysis with calculations seems an unnecessary expense and exercise given the vast amount of impervious reduction.

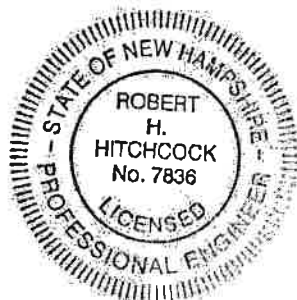
Thank you for your consideration of our waiver request.

Respectfully submitted,

SVE Associates



Rob Hitchcock, P.E.
Senior Engineer



**PROJECT NARRATIVE
&
SITE IMPACT ANALYSIS & USE INTENSITY STATEMENT**

**Nine A LLC
5-Lot Cluster Subdivision
Rt. 9A
Chesterfield, NH**

TMP 5K-B-3 and B-3.1 and 5N-B-1, B-2, B-9

12-30-19

In accordance with sections 404.5.E and 405.3 of the Chesterfield Land Development Regulations the following narrative describes the intensity of use and the site impacts associated with the proposed 5-lot cluster subdivision:

Project Narrative. This proposal involves five tracts owned by Nine A LLC located on Rt. 9A and adjacent to Spofford Lake. It includes the former Spofford Hall property and land located directly across Rt. 9A. The existing tracts are in the Residence District and also partially located in the Spofford Lake District. A variance was granted by the Chesterfield ZBA to allow a cluster subdivision within the Spofford Lake District. The following table summarizes the individual tracts and the proposed uses:

Tax Map Number	Lot Size	Existing Use	Proposed Use
5K-B-3	6.18 ac.	Spofford Hall	5 House lots and new road
5K-B-3.1	0.47 ac.	A butter leachfield and driveway	No change. To remain a separate lot.
5N-B-1	3.05 ac.	Spofford Hall sewer force main and paved parking lot	Sewer force main to leachfield and part of open space land
5N-B-2	19.52 ac.	Spofford Hall sewer treatment plant and leachfield area	Leachfield area and part of open space land
5N-B-9	66.53 ac.	Vacant land	A portion to become open space land. The remainder to be a separate vacant lot.
TOTAL	95.28 ac.	(Not incl. 5K-B-3.1)	

A cluster subdivision consisting of five single family house lots and open space land is proposed. The five house lots will be located entirely within the 6.18 acre tract 5K-B-3

along with a private road to provide access to the house lots. The private road will be a 385 foot long dead end road ending in a teardrop cul-de-sac. The open space land will encompass all of tracts 5N-B-1, 5N-B-2 and a portion of tract 5N-B-9. Over 30 contiguous acres, not including wetlands or steep slopes in excess of 25%, will be preserved as permanent open space.

The proposed lots will vary in size as indicated below:

LOT NUMBER	LOT SIZE	ROAD FRONTAGE	LAKE FRONTAGE
1	1.33 AC.+/-	225 FT.	155 ft.
2	0.89 AC.+/-	105 FT. on cul-de-sac *	255 ft.
3	0.97 AC.+/-	70 FT. on cul-de-sac *	280 ft.
4	0.89 AC.+/-	170 FT.	210 ft.
5	1.52 AC.+/-	180 FT.	155 ft.
New Road	0.58 AC.+/-	N/A	N/A
Open Space	36.74 AC.+/-	N/A	N/A
Residual Land	52.36 AC.+/-	257.34 FT	N/A
Total Land	95.28 AC. +/-		

- Per 301.2H: frontage requirements for cluster lots having more than half their frontage on the circumference of a cul-de-sac or teardrop are exempt from any frontage requirements of this ordinance.

Use Intensity Statement. The existing Spofford Hall building, the sewer treatment plant and the paved parking areas will be removed from the site. The disturbed areas will be loamed and seeded and stabilized to prevent erosion. The private road will be constructed 24' wide and 385' long ending in a teardrop cul-de-sac. A gravity sewer system will be constructed with stubs to each of the five proposed lots. The sewer main will discharge to a sewer pump station located within the private road right of way. The pump station will pump the wastewater across Rt. 9A and up the hill to an existing leachfield located over 900 feet from Spofford Lake.

Each of the five proposed house lots will have a separate driveway access from the private road. Each lot will have a private well for drinking water. Each lot has in excess of 150' lake frontage and is therefore entitled to a seasonal dock, however, docks are not included with this proposal. Each lot owner would be required to apply to NHDES for a dock permit.

Total lot coverage existing within the Spofford Lake District on these tracts is approximately 132,720 sf. When the existing buildings and pavement are removed, the new private road is constructed, and if each new house lot is developed to the maximum 20% lot coverage allowed in the Spofford Lake District, the total lot coverage will be reduced to approximately 59,989 sf. That is a 55% reduction in lot coverage within the Spofford Lake District on these tracts. This will help to improve the quality of stormwater runoff and help to improve the water quality at Spofford Lake.

Site Impact Analysis.

- 1. Soils and natural contours.** The soils within the developed area of the proposed cluster are Cardigan-Kearsarge-rock outcrop complex soils with slopes varying from 3% to 20%. The soils across Rt. 9A change to a Stissing silt loam with 0 – 5% slopes where the leachfield is located. There are also small areas of Pittstown silt loam at 3 – 8% slopes and Cardigan-Kearsarge-rock outcrop complex in the open space land and the remaining undeveloped land. Areas with slopes exceeding 25% are identified on a separate plan sheet. Approximately — acres contain steep slopes. No site disturbance is proposed in areas with steep slopes other than the installation of the new sewer force main up the existing driveway to the leachfield area across Rt. 9A.
- 2. Vegetation.** The 6.18 tract adjacent to Spofford Lake contains the existing Spofford Hall building and paved parking areas which cover approximately 101,320 sf. There are over thirty tall pines existing throughout the tract. The rest of the tract is lawn area. We anticipate that three of the tall pines will be removed with the demolition of the existing building and paved areas. The tracts across Rt. 9A contain an existing paved parking area and a former sewer treatment plan building. They cover approximately 31,400 sf. They will be removed, and the area loamed and seeded. The remainder of the land across Rt. 9A consists of over 85 acres of forested land, forested wetlands and open leachfield areas. Except for removing trees and woody vegetation from the leachfield area, the remainder of the land will be left untouched. The forested areas are a mix of hardwoods and conifers.
- 3. Wetlands and Open Space** There are several wetland areas on the tracts across Rt. 9 which are shown on the plans. They consist of forested wetlands, an intermittent stream and drainage areas near Rt. 9A. No wetland impacts are proposed. The total area of wetlands is approximately 4.18 acres. The proposed open space tract will contain 36.8 acres +/- of contiguous land area with 0.5 ac. +/- of wetlands and 4.2 ac. +/- steep slopes of 25% or greater. There is also 1.5 ac. +/- of leachfield area which have not been counted as open space area. Subtracting the leachfield area, the wetlands and the steep slopes leaves 30.6 +/- acres of contiguous open space.
- 4. Surface water quality.** The 6.18 acre tract has approximately 1055 feet frontage on Spofford Lake. Sediment and erosion control measures will be implemented as required by an NHDES Alteration of Terrain permit to protect the lake from sedimentation during the demolition of the existing buildings and parking areas and during the construction of the new private road. Existing drainage swales adjacent to Rt. 9A will also be protected. Existing catch basins on the developed portion of the site will be removed and/or protected to prevent any sedimentation reaching the lake. Typical erosion control measures will include silt fence, waddles and stone check dams. Four shallow stormwater collection and infiltration areas will be constructed along the lakeside edges of the residential

lots to provide sediment control for runoff from the residential lots and the private road.

5. **Groundwater quality, including impact on nearby wells.** A review of State aquifer maps indicates that no significant aquifer is located under this site. There is one existing well on the 6.18 acre site today. That well will be preserved and will be used to provide water to one of the proposed new house sites. The remaining four house sites will each be responsible for the installation of their own wells. Water consumption for the proposed five house lots is estimated at up to 3000 gallons per day. This is significantly lower than the previous use on the property as a treatment center which used up to 20,000 gallons per day when fully occupied. Stormwater runoff from the proposed new road will be collected and treated onsite with grass lined swales and partially infiltrated to groundwater, helping to replenish the local groundwater supply.
6. **Spatial relationships with abutting developments or potential development.** The proposed new house lots will be located on the 6.18 acre tract adjacent to the lake. The new lots will vary in size from 0.88 acres to 1.34 acres. In 2006, SWRPC did a study of the lakeside properties on Spofford Lake. The study shows 422 lots fronting on the lake. 267 of the lots were under 0.75 acres in size and 346 of the lots were under 2 acres in size. The proposed new lots are more conforming in lot size than 63% of the existing lakeside lots.
7. **Rural character, including the visual impact of the proposal as seen from surrounding properties and arterial streets.** The proposed plan will create five new residential lots varying in size from 0.88 acres to 1.34 acres. The residential lots will replace the existing 90,000 sf Spofford Hall building. When single family homes are built on the five residential lots, the new homes will be much more in keeping with the residential character of the area. Visually, there will be open views to the lake which are currently obstructed by the large existing building.
8. **Roads, streets, highways and on pedestrian and vehicular traffic.** Access to the property is from Rt. 9A, a State roadway, and will require a NHDOT driveway permit. A traffic analysis and traffic counts were performed by Stephen G. Pernaw & Company, Inc. at the site frontage on Rt. 9A during August 2019. It showed 21 existing vehicle trips during the AM peak hour, 49 vehicle trips during the PM peak hour and 59 vehicle trips during the Saturday peak hour. Traffic generated by the proposed new house lots, after each lot is developed and occupied, is estimated to add up to 4 vehicle trips during the AM peak hour and up to 5 vehicle trips during the PM peak hour and Saturday peak hour. This small increase in vehicle trips will not significantly affect the safety or capacity of Rt. 9A at this location. A copy of the traffic analysis is attached.

There are no sidewalks on Rt. 9A and there is very little pedestrian traffic in this area.

9. Sufficiency of utility systems for the provisions of water service, fire protection, sewer service, and storm drainage. The proposed new house lots will be serviced by on-site wells and a community septic system. Each lot will have a private water well for their own use. Sewage will be collected through gravity sewer mains to an on-site sewer pump station. The pump station will pump sewage through a new force main, across Rt. 9A and up the hill to an existing leachfield. The existing leachfield was inspected by a licensed septic system designer and found to be in good condition. Test pits and soil augurs performed at the site show that the existing on-site soils are capable of supporting the existing leachfield. See attached letter from Forest Designs.

Fire protection for the five proposed house lots will be provided by a water storage tank and fire pump system on the site with 30,000 gallons water storage. A dry hydrant will be installed adjacent to Rt. 9A at the site in a location easily accessible by the Fire Dept.

Stormwater generated by the new road on the site will sheet drain to roadside ditches and directed to grassy treatment swales between the house lots and directed to shallow collection areas for sedimentation and infiltration before water gets to the lake. No increase in runoff will leave the site and no untreated stormwater will be allowed to enter the lake.

10. Drainage and effect on abutters. Stormwater runoff from the new pavement and building areas will be directed to grassy swales and grassed infiltration areas on site prior to reaching the lake. Because of the 55% decrease in impermeable area the amount of stormwater runoff will be greatly reduced. Each of the grassy swales will treat and partially infiltrate runoff without increasing runoff onto adjacent properties.

11. The public school system. This is a proposal for 5 new single-family house lots. When the new homes are constructed it is not expected to result in a significant change in the town population or to have an impact on the local school system. According to SAU 29 enrollment data, from 2007 to 2015 the number of students in Chesterfield decreased by over 200 students. Enrollment has stayed fairly level since that time. The addition of school aged children from five single family homes is not expected to have a significant affect on the public school system.

12. Municipal solid waste. The addition of five single family homes will not result in a significant increase in solid waste.

13. Municipal, school and county revenues and expenditures. The 2019 property tax rate for Chesterfield is \$22.32. The Town portion is \$5.51; the school portion is \$10.91; the State Education portion is \$2.07; and the County portion is \$3.83. Based on the current tax rate, when the new residential lots are completed, and assuming a \$ 300,000 tax assessment per lot, this development will be expected to pay annual taxes of \$33,480 for the vacant lots (\$8,265 to the Town; \$16,365 to schools; \$3,105 to State education; and \$5,745 to the County).

Municipal expenditures associated with the undeveloped lots are expected to be minimal. When homes are built, each lot is expected to be assessed at over \$1,000,000. Property taxes on the 5 developed lots are expected to be over \$111,000 per year.

14. Police and fire protection and public safety. This development will be constructed to current building codes and will meet all life safety code requirements. Fire protection will be provided through the use of 30,000 gallons of water storage in underground tanks to be located at the intersection of the new road and Rt. 9A. A dry hydrant will be installed at the intersection for use by the local fire dept. The existing driveway will be configured to provide safe access for emergency vehicles.

15. Common Area and Open Space Ownership. The owners of Lots 1 through 5 will have a 20% share in ownership of the common areas and the open space land. The common areas include:

- The private road
- The sewer collection system including sewer manholes, sewer mains, septic tanks, the sewer pump station and the sewer force main.
- The fire protection system including the 30,000 gallon water cisterns and the dry hydrant.
- The leachfields and appurtenances

The open space land will consist of 36.74 acres located across Rt. 9A from the proposed new house lots. After the former sewer treatment plant is removed and the site restored, and after the leachfield area is cleared of trees and woody vegetation and stabilized with loam and grasses, the site will be maintained as permanent open space.

Maintenance of the road, the common utilities and the open space will be performed by a property management company and paid for by the owners of Lots 1-5. The road will be kept passable year-round to provide emergency access to all lots. The dry hydrant will be tested annually and reported to the Chesterfield Fire Dept. and the Spofford Fire Dept. The sewer pump station will be monitored and inspected as needed throughout the year.

MEMORANDUM

Ref: 1960A

To: James Phippard
Brickstone Masons, Inc.

From: Stephen G. Pernaw, P.E., PTOE

Subject: Proposed Residential Development
Spofford, New Hampshire

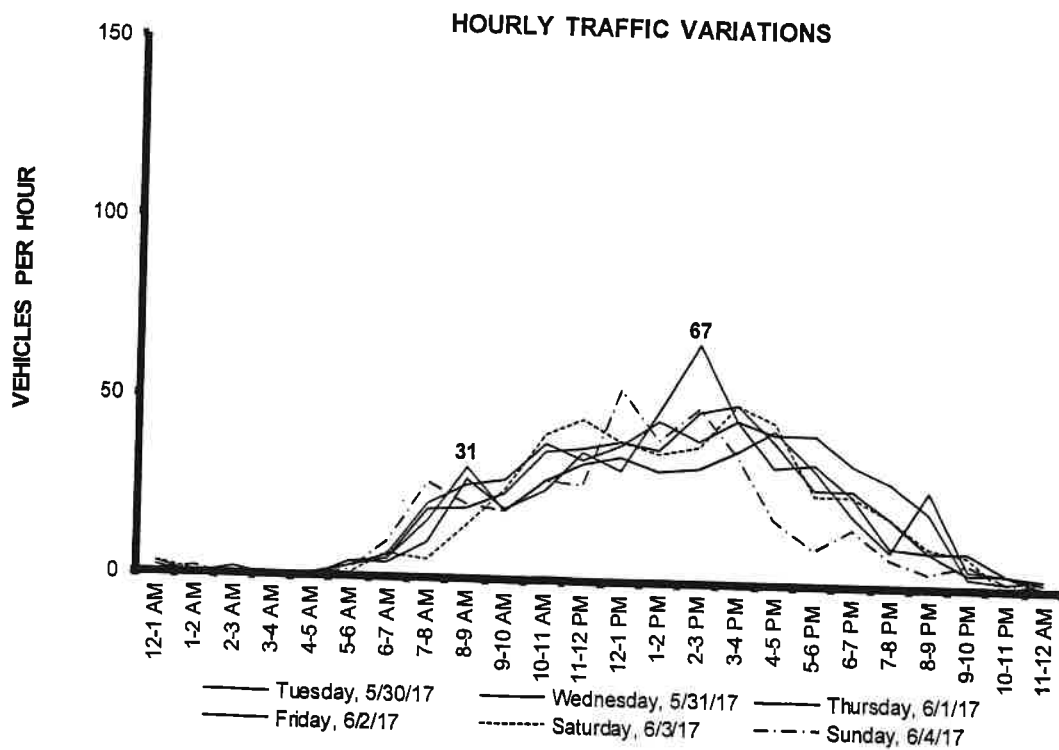
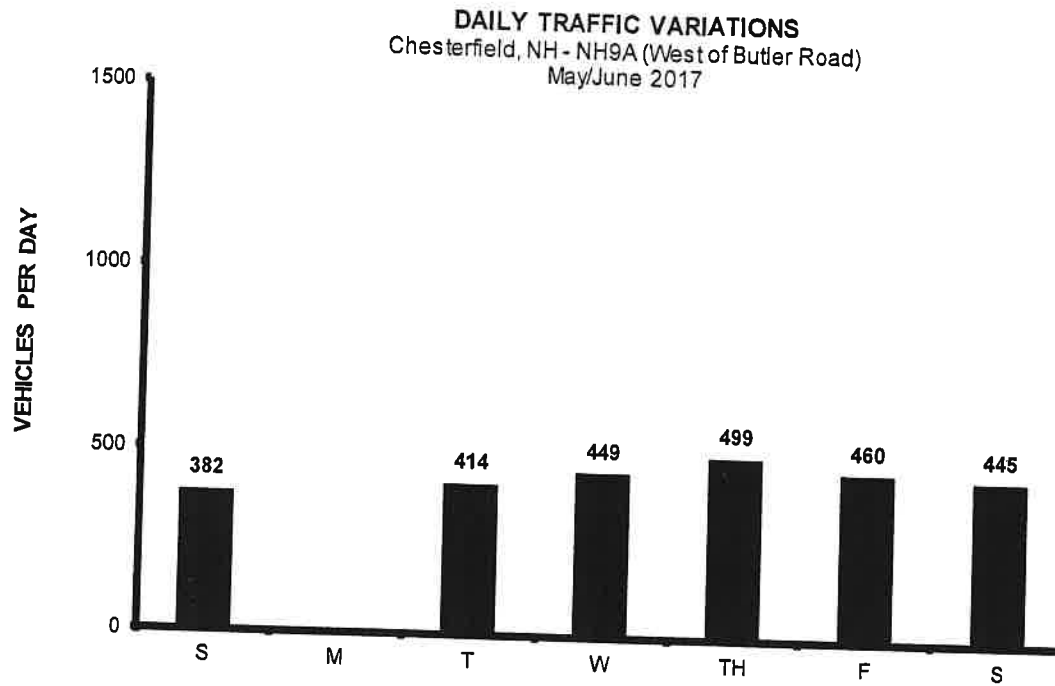
Date: September 23, 2019

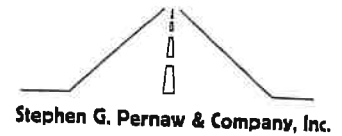
As requested, Pernaw & Company, Inc. has conducted a trip generation analysis for the proposed residential development located on NH Route 9A (NH9A) in Spofford, New Hampshire and conducted a traffic count at the subject site. The purpose of this memorandum is to summarize the results of our trip generation analyses, our research of available traffic count data, and the new August 2019 count data. To summarize:

Proposed Development – According to the plan entitled “*Conceptual Subdivision Plan*” prepared by Brickstone Masons, Inc. (see Attachment 1), the proposed development involves the construction of five single-family dwellings on the former Spofford Hall Property on NH9A in Spofford, New Hampshire. The site is located on both sides of NH9A approximately 500-feet west of the Pine Grove Springs Golf Course. The residences will be located on the north side of the highway. Access to the development will be provided via one new two-way private road on NH9A.

Existing Traffic Volumes – Research at the NHDOT revealed that there is a short-term Automatic Traffic Recorder count station located approximately 1,700-feet west of the proposed site on NH9A. According to the NHDOT reports, that section of NH9A (west of Butler Road) carried an Annual Average Daily Traffic (AADT) volume of approximately 421 vehicles per day (vpd) in 2018, up slightly from 417 vpd in 2017 (see Attachment 2).

This data demonstrates that weekday traffic volumes in the area typically reach peak levels from 8:00 to 9:00 AM and from 3:00 to 4:00 PM or 4:00 to 5:00 PM, thus corresponding to the typical commuter periods. The diagrams on Page 2 summarize the daily and hourly variations in traffic demand along NH9A. The detail sheets pertaining to these counts are attached (see Attachment 3).





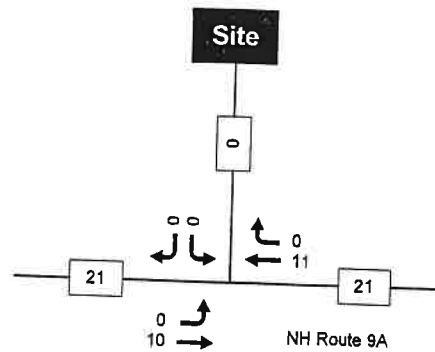
To supplement this data, Pernaw & Company, Inc. conducted Automatic Traffic Recorder counts on Thursday, August 22, 2019, Friday, August 23, 2019 and Saturday, August 24, 2019 in the general vicinity of the existing site driveway on NH9A. These counts were conducted from 2:00 to 6:00 PM on Thursday, from 7:00 to 9:00 AM on Friday and from 10:00 AM to 5:00 PM on Saturday. The new 2019 count data for the study area is summarized on Figure 1. Several facts and conclusions are evident from this data.

- The AM traffic flow reached peak levels from 7:30 to 8:30 AM. NH9A carried 21 vehicles and the direction split was reasonably even during this period.
- During the PM peak hour the traffic flow reached peak levels from 4:30 to 5:30 PM. NH9A carried 49 vehicles and the majority (53%) traveled in the westbound direction during this period.
- The Saturday traffic flow reached peak levels from 2:30 to 3:30 PM. NH9A carried 59 vehicles and the majority (53%) traveled in the westbound direction during this period.

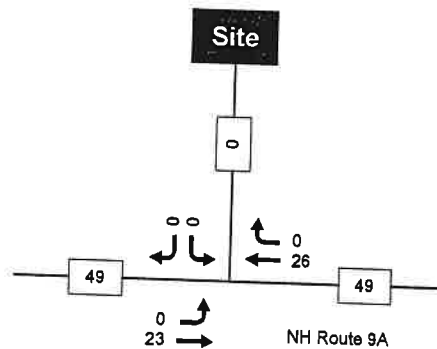
Attachments 4 - 6 contain detail sheets pertaining to the raw automatic traffic recorder count data.

Pernaw & Company, Inc

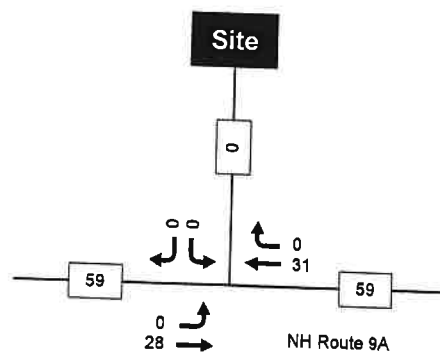
AM PEAK HOUR
Friday, August 23, 2019
7:30 to 8:30 AM



PM PEAK HOUR
Thursday, August 22, 2019
4:30 to 5:30 PM



SATURDAY PEAK HOUR
Saturday, August 24, 2019
2:30 to 3:30 PM



1960A

Figure 1

2019 Existing Traffic Volumes

Traffic Evaluation, Proposed Residential Subdivision, Spofford, New Hampshire

NORTH



No-Build Traffic Volumes – The weekday peak hour traffic volume projections without the proposed residential development for 2020 (opening year) were derived from the August 2019 automatic traffic recorder count data using a peak-month seasonal adjustment factor of 1.02 and an annual background growth rate of 1.0% per year, compounded annually (see Attachments 7-10).

Trip Generation - To estimate the quantity of vehicle-trips that will be produced by the proposed residential subdivision, the standard trip generation rates and equations published by the Institute of Transportation Engineers¹ (ITE) were considered. The appropriate ITE Land Use Code (LUC) for this specific type of use is LUC 210 (Single-Family Detached Housing). The table below summarizes the results of the trip generation analysis for the AM, PM and Saturday peak hour periods, and is based on the number of units as the independent variable.

Table 1

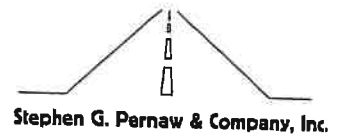
Trip Generation Summary

	5 Single-Family Dwelling Units
Weekday Total	
Entering	24 veh
Exiting	<u>24 veh</u>
Total	48 trips
Weekday AM Peak Hour	
Entering	1 veh
Exiting	<u>3 veh</u>
Total	4 trips
Weekday PM Peak Hour	
Entering	3 veh
Exiting	<u>2 veh</u>
Total	5 trips
Saturday Total	
Entering	24 veh
Exiting	<u>24 veh</u>
Total	48 trips
Saturday Peak Hour	
Entering	3 veh
Exiting	<u>2 veh</u>
Total	5 trips

¹ ITE Land Use Code 210 - Single-Family Detached Housing - Rate Method (5 Dwelling Units)

This analysis indicates that the proposed residential development will generate approximately 5 vehicle-trips (3 arrivals, 2 departures) during the weekday and Saturday peak hour periods when fully occupied (see Attachment 11 & 12). Attachment 13 contains a diagram that summarizes the distribution of the site traffic at the proposed intersection.

¹ Institute of Transportation Engineers, *Trip Generation*, 10th Edition (Washington, D.C., 2017)



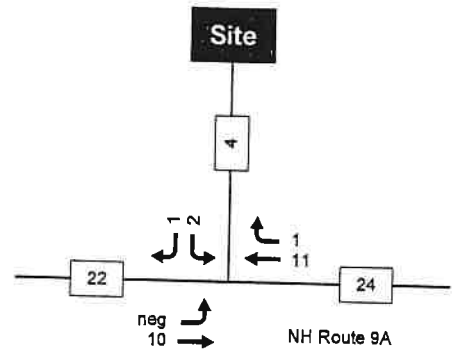
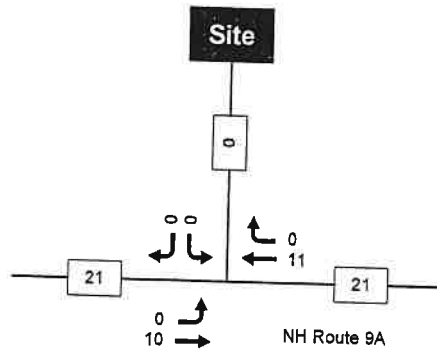
Build Traffic Projections - These projections are summarized on Figure 2 and are based on the trip generation estimates from Table 1 and the expectation that the majority of site traffic (70%) will travel to/from points east on NH9A. Figure 3 provides a comparison between the No-Build and Build traffic projections.

Pernaw & Company, Inc

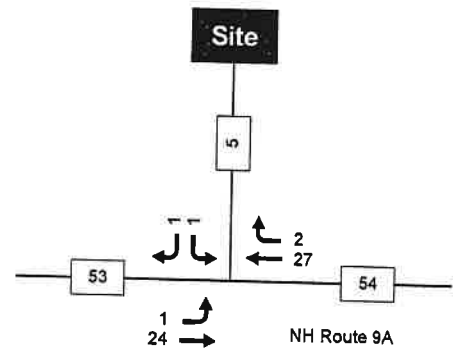
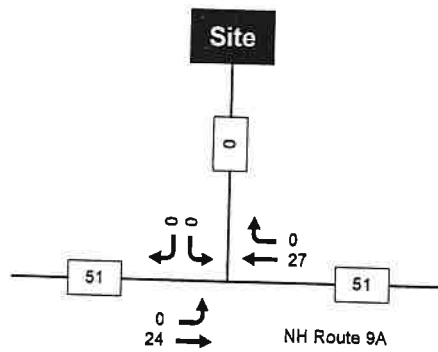
2020 NO-BUILD

2020 BUILD

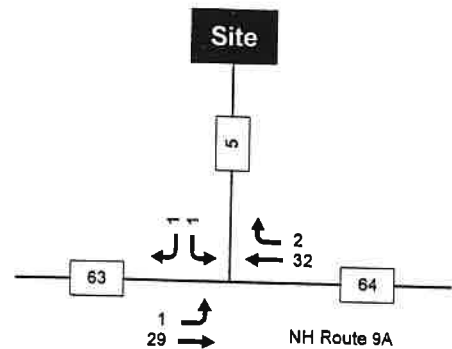
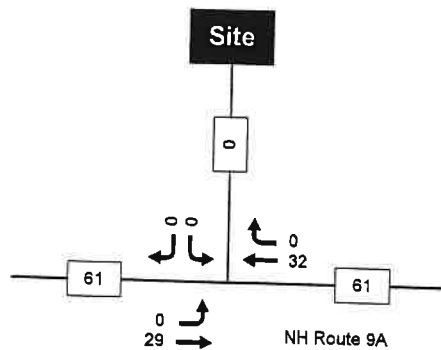
AM PEAK HOUR



PM PEAK HOUR



SATURDAY PEAK HOUR



1960A

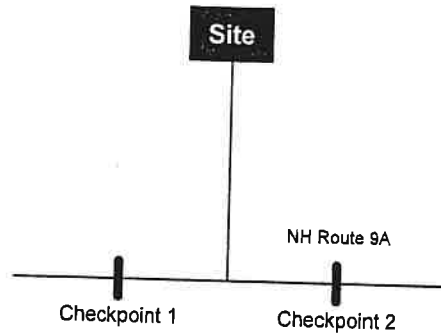
NORTH

Figure 2

Future Traffic Volumes - 2020

Traffic Evaluation, Proposed Residential Subdivision, Spofford, New Hampshire

Pernaw & Company, Inc



I. AM Peak Hour

Location	2020 No-Build	2020 Build	Change	% Change
Checkpoint 1	21	22	+1 veh	5%
Checkpoint 2	21	24	+3 veh	14%

II. PM Peak Hour

Location	2020 No-Build	2020 Build	Change	% Change
Checkpoint 1	51	53	+2 veh	4%
Checkpoint 2	51	54	+3 veh	6%

III. Saturday Peak Hour

Location	2020 No-Build	2020 Build	Change	% Change
Checkpoint 1	61	63	+2 veh	3%
Checkpoint 2	61	64	+3 veh	5%

1960A

NORTH

Figure 3

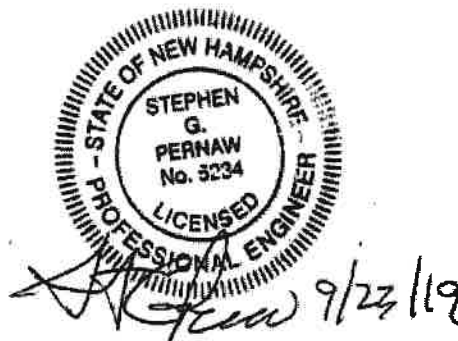
2020 Impact Summary

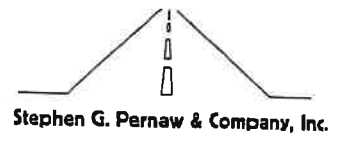
Traffic Evaluation, Proposed Residential Subdivision, Spofford, New Hampshire

Findings & Conclusions:

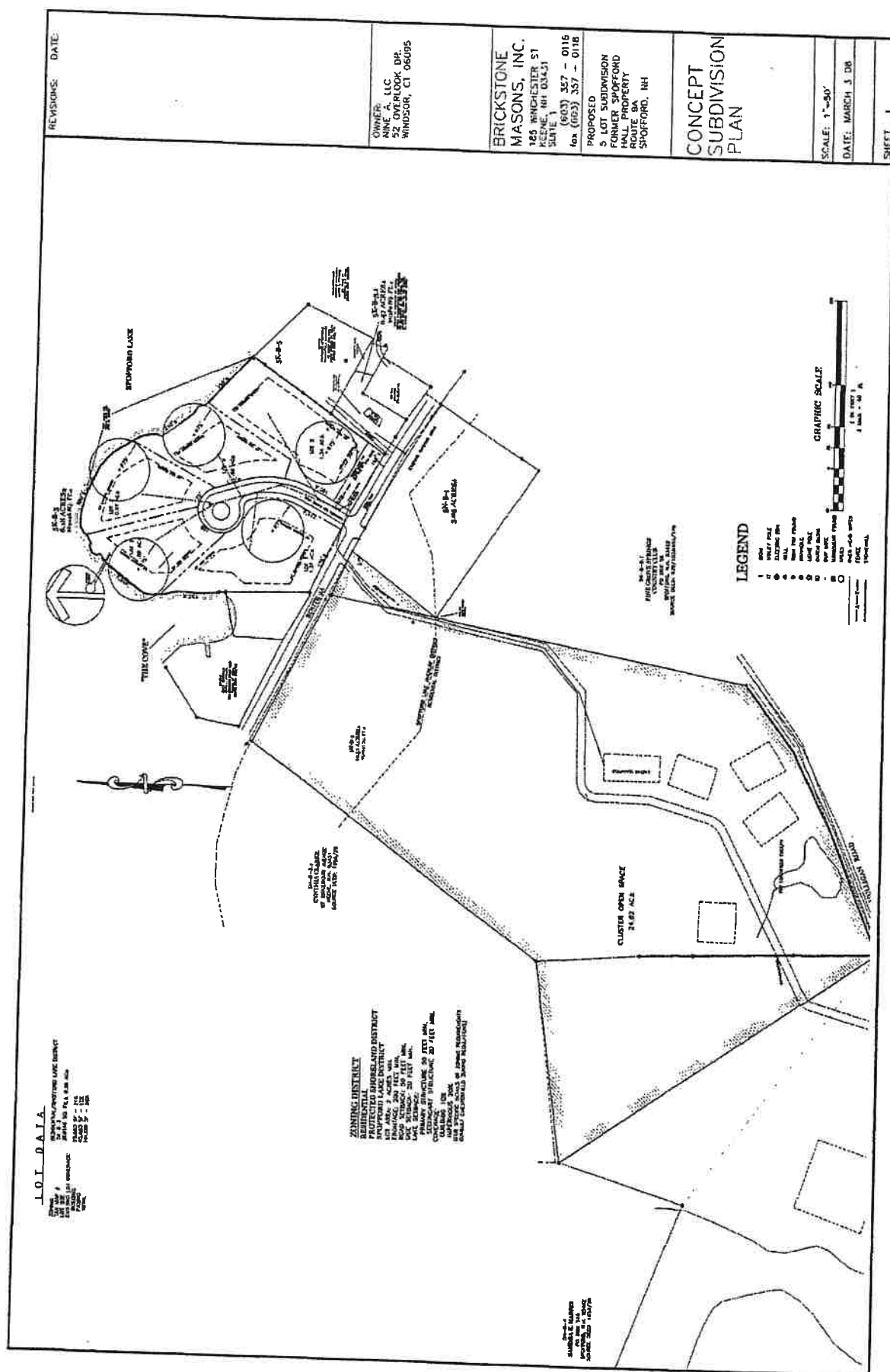
1. The nearby NHDOT count station on NH9A revealed that traffic demand on NH9A is not constant; rather it varies from hour to hour and day to day due to the "randomness" of traffic flow. This data shows that the traffic demand ranged from 20-31 vehicles (AM Peak Hour) and from 43-50 vehicles (PM Peak Hour), thus ranged by as much as 11 vehicles per hour due to random traffic flow.
2. The automatic traffic recorder count data collected by Pernaw & Co., Inc. in August 2019 revealed that NH9A (at the subject site) carried 21 vehicles during the AM peak hour period, 49 vehicles during the PM peak hour period and 59 vehicles during the Saturday peak hour period.
3. The trip generation analysis indicates that the proposed residential development will generate approximately 4 vehicle-trips during the AM peak hour (1 arrivals, 3 departures) and 5 vehicle-trips during both the PM and Saturday peak hours (3 arrivals, 2 departures) on an average basis, once fully occupied. No single section of NH9A will accommodate all +5 vehicle-trips and some will travel to/from the east while others travel to/from points west on NH9A. Random traffic flow from one day to the next results in greater changes than will occur as a result of the proposed subdivision.
4. Vehicular increases of this order of magnitude will not significantly alter the prevailing traffic conditions on this section of NH9A in terms of traffic operations, intersection capacity, and roadway capacity. Maintaining clear sight lines looking left and right from the private road approach to NH9A will ensure that drivers are able to safely enter the traffic flow on NH9A.
5. The appropriate form of traffic control at the proposed private road intersection on NH9A includes the installation of STOP sign control (MUTCD R1-1) on the minor approach and an 18-inch white stop line. Providing a short section of four-inch double yellow center line on the private road to separate inbound and outbound vehicles is optional, but advisable.

Attachments





ATTACHMENTS



List View All DIRs

Record	1822	of 5709	Goto Record	go
Location ID	82087057		MPO ID	
Type	SPOT		HPMS ID	
On NHS	No		On HPMS	No
LRS ID	S0000009A		LRS Loc Pt.	
SF Group	04	Route Type		
AF Group	04	Route	NH 9A	
GF Group	0	Active	Yes	
Class Dist Grp	Default	Category	3	
Seas Class Grp	Default			
WIM Group	Default			
QC Group	Default			
Funct'l Class	Minor Collector	Milepost		
Located On	NH Route 9A			
Loc On Alias	NH 9A WEST OF BUTLER RD			
PR	MP	PT		
More Detail				
STATION DATA				

Directions: 2-WAY

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2018	421 ³		16		388 (92%)	33 (8%)	Grown from 2017
2017	417	67	16		388 (93%)	29 (7%)	
2016	324 ³				296 (91%)	28 (9%)	Grown from 2015
2015	319 ³						Grown from 2014
2014	310						

<< < > >> 1-5 of 13

Travel Demand Model

Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV
------------	------------	--------	--------	--------	--------	--------	--------	--------	--------

VOLUME COUNT

Date	Int	Total
Sun 6/4/2017	60	382
Sat 6/3/2017	60	445
Fri 6/2/2017	60	460
Thu 6/1/2017	60	499
Wed 5/31/2017	60	449
Tue 5/30/2017	60	414
Sun 4/27/2014	60	282
Sat 4/26/2014	60	379

VOLUME TREND

Year	Annual Growth
2018	1%
2017	29%
2016	2%
2015	3%
2014	-15%
2011	-5%
2008	-9%
2005	3%



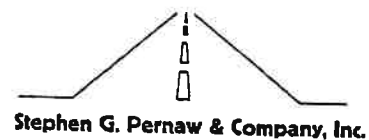
Transportation Data Management System



Excel Version

Weekly Volume Report			
Location ID:	82087057	Type:	SPOT
Located On:	NH Route 9A	:	
Direction:	2-WAY		
Community:	CHESTERFIELD	Period:	Mon 5/29/2017 - Sun 6/4/2017
AADT:	417		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg	Graph
12:00 AM		0	0	2	3	3	1	2	0.3%
1:00 AM		0	0	0	0	1	2	1	0.1%
2:00 AM		0	0	2	0	0	0	0	0.1%
3:00 AM		0	0	0	0	1	0	0	0.0%
4:00 AM		0	0	0	1	1	0	0	0.1%
5:00 AM		4	3	4	3	1	2	3	0.6%
6:00 AM		5	6	4	5	7	10	6	1.4%
7:00 AM		16	21	10	19	5	27	16	3.7%
8:00 AM		31	26	28	20	15	21	24	5.3%
9:00 AM		19	28	20	24	25	19	23	5.1%
10:00 AM		28	38	25	36	41	28	33	7.4%
11:00 AM		33	34	36	37	45	27	35	8.0%
12:00 PM		35	38	31	39	39	54	39	8.9%
1:00 PM		31	45	48	37	36	40	40	8.9%
2:00 PM		32	40	67	48	38	49	46	10.3%
3:00 PM		37	46	46	50	50	36	44	10.0%
4:00 PM		43	33	42	40	45	18	37	8.3%
5:00 PM		32	34	42	27	25	10	28	6.4%
6:00 PM		20	25	34	27	25	16	25	5.5%
7:00 PM		10	11	29	19	19	8	16	3.6%
8:00 PM		27	10	21	10	11	4	14	3.1%
9:00 PM		5	4	3	10	9	7	6	1.4%
10:00 PM		4	4	2	4	0	2	3	0.6%
11:00 PM		2	3	3	1	3	1	2	0.5%
Total	0	414	449	499	460	445	382		
24hr Total		414	449	499	460	445	382	442	
AM Pk Hr		11:00	10:00	11:00	11:00	11:00	10:00		
AM Peak		33	38	36	37	45	28	36	
PM Pk Hr		4:00	3:00	2:00	3:00	3:00	12:00		
PM Peak		43	46	67	50	50	54	52	
% Pk Hr		10.39%	10.24%	13.43%	10.87%	11.24%	14.14%	11.72%	



Study Name 1960A Fri AM

Start Date 08/23/2019

Start Time 7:00 AM

Site Code 1960A

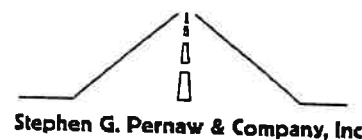
Weather:

Collected By: MV

Job Number: 1960A

Town/State: Chesterfield, NH

Direction			Total	
	Westbound	Eastbound		
7:00 AM	1	1	2	
7:15 AM	1	0	1	
7:30 AM	2	1	3	
7:45 AM	1	5	6	12
8:00 AM	4	0	4	14
8:15 AM	4	4	8	21
8:30 AM	1	0	1	19
8:45 AM	4	3	7	20
Total	18	14	32	
PH 7:30-8:30 AM	11	10	21	



Study Name 1960A Thurs PM

Start Date 08/22/2019

Start Time 2:00 PM

Site Code 1960A

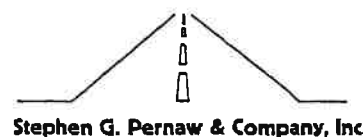
Weather:

Collected By: MV

Job Number: 1960A

Town/State: Chesterfield, NH

Direction			Total	
	Westbound	Eastbound		
2:00 PM	4	9	13	
2:15 PM	6	4	10	
2:30 PM	6	7	13	
2:45 PM	3	4	7	43
3:00 PM	7	7	14	44
3:15 PM	2	6	8	42
3:30 PM	5	8	13	42
3:45 PM	6	4	10	45
4:00 PM	3	5	8	39
4:15 PM	5	7	12	43
4:30 PM	5	3	8	38
4:45 PM	8	2	10	38
5:00 PM	7	8	15	45
5:15 PM	6	10	16	49
5:30 PM	2	6	8	49
5:45 PM	3	3	6	45
Total	78	93	171	
PH 4:30-5:30 PM	26	23	49	



Study Name 1960A Sat

Start Date 08/24/2019

Start Time 10:00 AM

Site Code 1960A

Location: Vicinity of Abandoned Building

Collected By: MV

Job Number: 1960A

Town/State: Chesterfield, NH

Direction	Westbound	Eastbound	Total	
10:00 AM	8	6	14	
10:15 AM	7	7	14	
10:30 AM	8	6	14	
10:45 AM	6	5	11	53
11:00 AM	6	3	9	48
11:15 AM	9	4	13	47
11:30 AM	6	3	9	42
11:45 AM	7	9	16	47
12:00 PM	7	3	10	48
12:15 PM	5	2	7	42
12:30 PM	7	1	8	41
12:45 PM	12	11	23	48
1:00 PM	5	2	7	45
1:15 PM	6	9	15	53
1:30 PM	4	4	8	53
1:45 PM	6	2	8	38
2:00 PM	6	4	10	41
2:15 PM	2	2	4	30
2:30 PM	6	5	11	33
2:45 PM	10	13	23	48
3:00 PM	9	4	13	51
3:15 PM	6	6	12	59
3:30 PM	1	2	3	51
3:45 PM	2	6	8	36
4:00 PM	3	5	8	31
4:15 PM	3	8	11	30
4:30 PM	6	4	10	37
4:45 PM	6	5	11	40
Total	169	141	310	
PH 2:30-3:30 PM	31	28	59	

**Seasonal Adjustment Factors
NHDOT Group 4 (Urban Highways)**

Year 2018 Monthly Data - Urban

<u>Month</u>	ADT	Adjustment to	
		Average	Peak
Jan	11,282	1.13	1.24
Feb	11,848	1.08	1.18
Mar	11,828	1.08	1.18
Apr	12,491	1.02	1.12
May	13,587	0.94	1.03
Jun	13,911	0.92	1.00
Jul	13,765	0.93	1.01
Aug	13,945	0.92	1.00
Sep	13,168	0.97	1.06
Oct	13,367	0.96	1.04
Nov	12,215	1.05	1.14
Dec	11,963	1.07	1.17

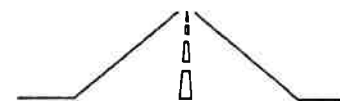
Year 2017 Monthly Data - Urban

<u>Month</u>	ADT	Adjustment to	
		Average	Peak
Jan	12254	1.21	1.33
Feb	13494	1.10	1.21
Mar	14335	1.03	1.14
Apr	15004	0.99	1.09
May	15547	0.95	1.05
Jun	16310	0.91	1.00
Jul	15523	0.95	1.05
Aug	15974	0.93	1.02
Sep	15546	0.95	1.05
Oct	15104	0.98	1.08
Nov	14544	1.02	1.12
Dec	14151	1.05	1.15

Year 2016 Monthly Data - Urban

<u>Month</u>	ADT	Adjustment to	
		Average	Peak
Jan	13573	1.16	1.25
Feb	14038	1.12	1.21
Mar	15731	1.00	1.08
Apr	16139	0.97	1.05
May	15705	1.00	1.08
Jun	16766	0.94	1.01
Jul	15752	1.00	1.08
Aug	16529	0.95	1.03
Sep	17007	0.92	1.00
Oct	16598	0.94	1.02
Nov	15649	1.00	1.09
Dec	14638	1.07	1.16

Average Peak-Month Factor	1.02
----------------------------------	-------------



Stephen G. Perna & Company, Inc.

STEPHEN G. PERNAW & COMPANY, INC.

PROJECT: Proposed Residential Subdivision, Chesterfield, New Hampshire

NUMBER: 1960A

COUNT STATION: 82087057

HISTORICAL GROWTH CALCULATIONS

LOCATION : NH9A (West of Butler Road) - Chesterfield, NH
CASE : AADT

ARITHMETIC PROJECTIONS

YEAR AADT

2011 500
2014 310
2015 319
2016 324
2017 417
2018 421

Regression Output:

Constant 18082.622
Std Err of Y Est 81.865579
R Squared 0.0815074
No. of Observations 6
Degrees of Freedom 4

X Coefficient -8.7837838
Std Err of Coef. 14.743178

PROJECTIONS

2019 348
2020 339
2021 331
2022 322
2023 313
2024 304
2025 295
2026 287
2027 278
2028 269
2029 260

RATE = -9 VPD/YEAR

GEOMETRIC PROJECTIONS

YEAR AADT Ln AADT

2011 500 6.21461
2014 310 5.73657
2015 319 5.76519
2016 324 5.78074
2017 417 6.03309
2018 421 6.04263

Regression Output:

Constant 41.80940
Std Err of Y Est 0.2129465
R Squared 0.0511353
No. of Observations 6
Degrees of Freedom 4

X Coefficient -0.0178053
Std Err of Coef. 0.0383496

PROJECTIONS

2019 351
2020 345
2021 339
2022 333
2023 327
2024 321
2025 315
2026 310
2027 304
2028 299
2029 294

Conclusion: Use 1.8%

RATE = -1.8 % / YEAR



Transportation Data Management System

List View All DIRs

Record	◀◀ 1822 ▶▶	of 5709	Goto Record	go								
Location ID	82087057		MPO ID									
Type	SPOT		HPMS ID									
On NHS	No		On HPMS	No								
LRS ID	S0000009A		LRS Loc Pt									
SF Group	04	▶	Route Type									
AF Group	04	▶	Route	NH 9A								
GF Group	0	▶	Active	Yes								
Class Dist Grp	Default	▶	Category	3								
Seas Class Grp	Default	▶										
WIM Group	Default	▶										
QC Group	Default											
Funct'l Class	Minor Collector		Milepost									
Located On	NH Route 9A											
Loc On Alias	NH 9A WEST OF BUTLER RD											
<table border="1"> <tr> <td>PR</td> <td>MP</td> <td>PT</td> <td>▼</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>					PR	MP	PT	▼				
PR	MP	PT	▼									
More Detail ▶												
STATION DATA												

Directions: 2-WAY

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2018	421 ³		16		388 (92%)	33 (8%)	Grown from 2017
2017	417	67	16		388 (93%)	29 (7%)	
2016	324 ³				296 (91%)	28 (9%)	Grown from 2015
2015	319 ³						Grown from 2014
2014	310						

1-5 of 13

Travel Demand Model										
Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV	

VOLUME COUNT			
Date	Int	Total	
Sun 6/4/2017	60	382	
Sat 6/3/2017	60	445	
Fri 6/2/2017	60	460	
Thu 6/1/2017	80	499	
Wed 5/31/2017	60	449	
Tue 5/30/2017	60	414	
Sun 4/27/2014	60	282	
Sat 4/26/2014	60	379	

VOLUME TREND	
Year	Annual Growth
2018	1%
2017	29%
2016	2%
2015	3%
2014	-15%
2011	-5%
2008	-9%
2005	3%

List View All DIRs

Record	1822	of 5709	Goto Record	go						
Location ID	82087057		MPO ID							
Type	SPOT		HPMS ID							
On NHS	No		On HPMS	No						
LRS ID	S0000009A		LRS Loc Pt.							
SF Group	04	Route Type								
AF Group	04	Route	NH 9A							
GF Group	D	Active	Yes							
Class Dist Grp	Default	Category	3							
Seas Class Grp	Default									
WIM Group	Default									
QC Group	Default									
Funct'l Class	Minor Collector	Milepost								
Located On	NH Route 9A									
Loc On Alias	NH 9A WEST OF BUTLER RD									
<table border="1"> <tr> <td>PR</td> <td>MP</td> <td>PT</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>					PR	MP	PT			
PR	MP	PT								
More Detail										
STATION DATA										

Directions: 2-WAY

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2011	500						
2008	580						
2005	780						
2002	710						
1999	340						

6-10 of 13

Travel Demand Model										
Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV	

VOLUME COUNT			
	Date	Int	Total
	Sun 6/4/2017	60	382
	Sat 6/3/2017	60	445
	Fri 6/2/2017	60	460
	Thu 6/1/2017	60	499
	Wed 5/31/2017	60	449
	Tue 5/30/2017	60	414
	Sun 4/27/2014	60	282
	Sat 4/26/2014	60	379
	Fri 4/25/2014	60	374
	Thu 4/24/2014	60	311

VOLUME TREND	
Year	Annual Growth
2018	1%
2017	29%
2016	2%
2015	3%
2014	-15%
2011	-5%
2008	-9%
2005	3%
2002	28%
1999	-10%

1-10 of 47
mm/dd/yyyy To Date

1-10 of 12

Trip Generation Summary

Alternative: Alternative 1

Phase:

Project: 1960A

Open Date: 8/29/2019

Analysis Date: 8/29/2019

ITE	Land Use	Weekday Average Daily Trips				Weekday AM Peak Hour of Adjacent Street Traffic				Weekday PM Peak Hour of Adjacent Street Traffic			
		*	Enter	Exit	Total	*	Enter	Exit	Total	*	Enter	Exit	Total
210	SFHOUSE 1		24	23	47		1	3	4		3	2	5
5	Dwelling Units												
	Unadjusted Volume		24	23	47		1	3	4		3	2	5
	Internal Capture Trips		0	0	0		0	0	0		0	0	0
	Pass-By Trips		0	0	0		0	0	0		0	0	0
	Volume Added to Adjacent Streets		24	23	47		1	3	4		3	2	5

Total Weekday Average Daily Trips Internal Capture = 0 Percent

Total Weekday AM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

Total Weekday PM Peak Hour of Adjacent Street Traffic Internal Capture = 0 Percent

* - Custom rate used for selected time period.

Source: Institute of Transportation Engineers, Trip Generation Manual 10th Edition
 TRIP GENERATION 10, TRAFFICWARE, LLC

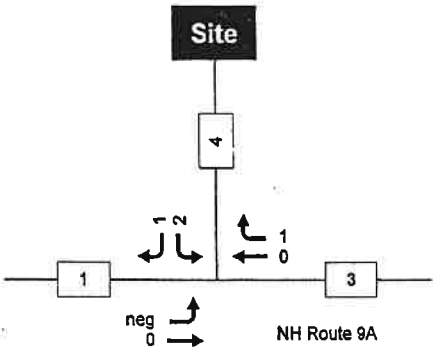
Analysis Date: 8/29/2019

Total Saturday Average Daily Trips Internal Capture = 0 Percent
Total Saturday Peak Hour of Generator Internal Capture = 0 Percent

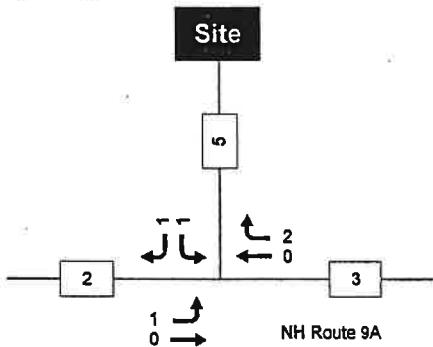
P. 1

Pernaw & Company, Inc

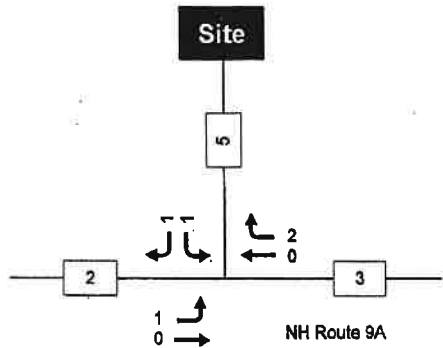
AM PEAK HOUR



PM PEAK HOUR



SATURDAY PEAK HOUR



Soil Map—Cheshire County, New Hampshire (NINE A LLC PROPERTY)







































Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

11/18/2019
Page 1 of 3

Soil Map—Cheshire County, New Hampshire
(NINE A LLC PROPERTY)

MAP LEGEND

Area of Interest (AOI)			Spoil Area
	Area of Interest (AOI)		Stony Spot
Soils			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
Special Point Features		Water Features	
	Blowout		Streams and Canals
	Borrow Pit	Transportation	
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow	Background	
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cheshire County, New Hampshire
Survey Area Data: Version 22, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 9, 2011—May 12, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
336B	Pittstown silt loam, 3 to 8 percent slopes, very stony	10.8	12.0%
341B	Stissing silt loam, 0 to 5 percent slopes, very stony	20.6	22.9%
361C	Cardigan-Kearsarge-Rock outcrop complex, 8 to 15 percent slopes	41.6	46.1%
361D	Cardigan-Kearsarge-Rock outcrop complex, 15 to 25 percent slopes	9.9	11.0%
367C	Dutchess silt loam, 8 to 15 percent slopes, very stony	7.2	7.9%
W	Water	0.1	0.1%
Totals for Area of Interest		90.1	100.0%

August 21, 2013

James Phippard
Brickstone Land Use Consultants
185 Winchester Street
Keene, NH 03431

Subject: Soils tests and site evaluation on the Spofford Hall property, South side of Rte. 9A, Spofford, NH.

Jim,

One test pit was dug in the fill extension of the existing Leach field #5, C.T. Male plan SR1, Sheet 1 of 24, dated 12/16/87.


The data from this pit indicate adequate soils which could support an on-site sewage disposal system. The area tested met all of the required State of NH and Town of Chesterfield setbacks to wetlands and property lines.

The existing system is approximately 65' wide by 140' long and is comprised of several large dispersal tanks and a manifold line feeding into many 4' by 12' concrete chambers. Two of the view ports were removed and the bed bottom inspected and was found to be dry and consisted of a clean medium to coarse sand. An augur was used to a depth of 4' with the composition being the same to that depth.

The existing EDA is rated for approximately 5,000 GPD and the proposed 5 lots on the lake side could have up to 5 bedrooms each @ 750 GPD per bedroom for a total of 3,750 GPD and still have over 1000 gal of reserve.

The existing sewage disposal system would appear to be in good working order were it to be reactivated. Of course a new design and submission to the state would be required and all components of the system must be exposed and inspected by myself and the state inspector.

Thank you,


Tom Forest Designer #342
Wetland Scientist #180
Forest Designs
185 Winchester Street
Keene, NH 03431
Cell phone 603.313.1313
Web site www.forestdesigns.net





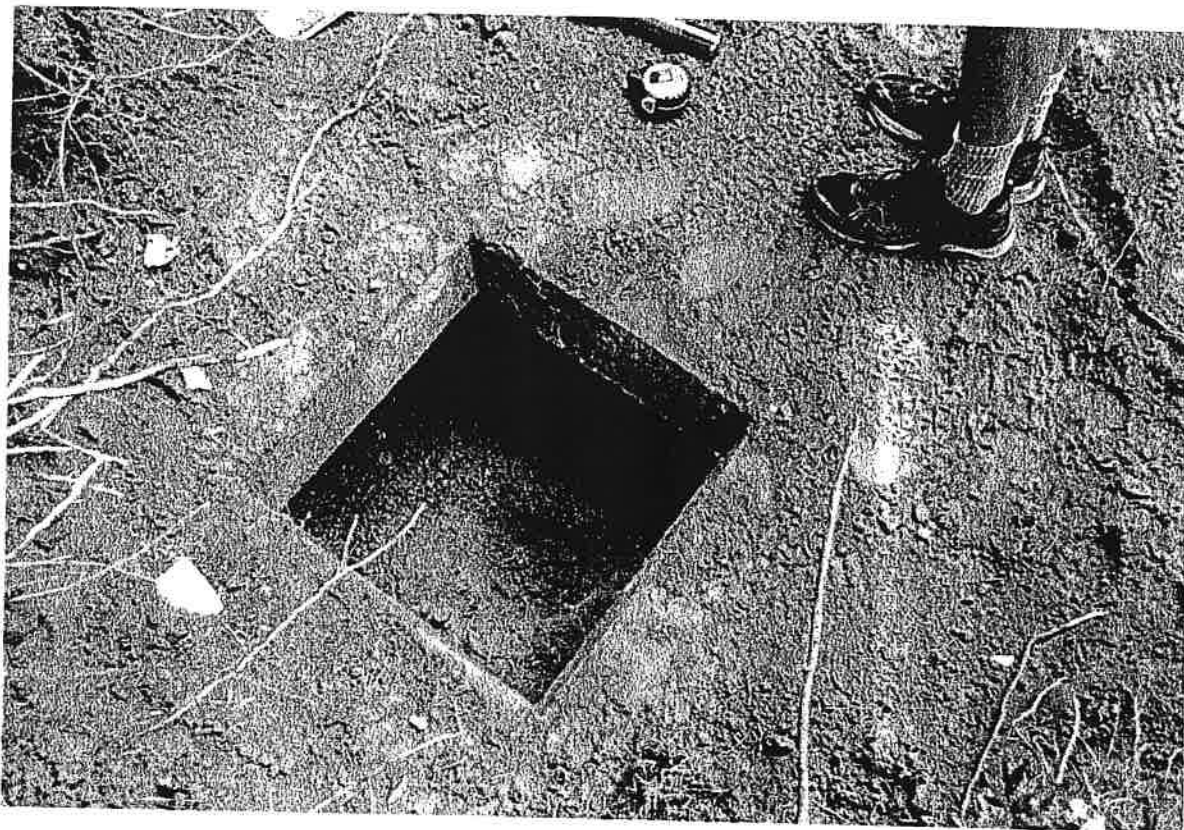
Date:12/28/2011

oneilcon@msn.com

Brickstone Land Use Consultants, LLC
185 Winchester St
Keene NH, 03431

Dear Dave Bergeron

On Monday 8/19/13 we did a septic inspection on Tax Map #5N, Lot 2, Bed #5. We dug up 2 concrete chambers and removed port covers on both to inspect the inside receiving soil. We noted that the sand was dry, and there was no bio mat, and no odor present. We also dug a test pit in the fill extension to an 8 foot depth. Backfilled all areas. Pictures attached. Please let me know if I can be of further assistance.



Chamber with inspection port removed



Inside of chamber looking into connecting chamber



O'NEIL CONSTRUCTION, LLC
EXCAVATION SPECIALISTS

Thank You David O'Neil

603-827-3497 or 603-358-0541

oneilcon@msn.com

**TOWN OF CHESTERFIELD, NH
NOTICE OF DECISION
ZONING BOARD OF ADJUSTMENT**


You are hereby notified that on Tuesday, January 14, 2014 the Zoning Board of Adjustment met to hear **Nine A LLC** represented by James Phippard of Brickstone Land Use Consultants and Attorney William Saturley, request for a Variance from Article II, Section 203.6a of the zoning ordinance to allow a five (5) unit cluster subdivision in the Spofford Lake District. The property is located at Route 9A, Spofford (Map 5K Lot B3, Map 5N Lots B1, B2, and B9) Residential/Spofford Lake District. (Continued from December 10, 2013)

A motion was made to accept the application for a variance of Nine A LLC for Article II of Section 203.6a of the Chesterfield Zoning Ordinance.

Criteria for approval:

- *The variance is not contrary to the public interest. The immediate neighborhood is single family dwellings and this project will add single family dwellings. The owner will be removing a large industrial or institutional use that's there now and will turn it back into a residential use going forward.*
- *The spirit of the ordinance is observed. While this project is being zoned as a cluster subdivision the net result is residential housing. The lot has been found to be a single lot on both sides of the road. The 30 acre project size calculates to six (6) acres per lot, compared to the two (2) acre requirement for underlying zoning. All cluster zone regulations are to be complied with.*
- *Substantial justice is done. Yes.*
- *The values of surrounding properties are not diminished. The owner will be taking away a derelict institutional building that is no longer being used and putting in houses. They will comply with all the New Hampshire Shore Land Protection requirements, such that the septic systems and storm water runoff systems will be properly accounted for, thereby protecting the lake.*
- *Literal enforcement of the ordinance would result in unnecessary hardship.*
 - (a) Because of special conditions of the property. Yes, the special condition of this property is a 90,000 square foot institutional building in a residential district. The change to a five home residential development will result in a lot coverage reduction of more than 50%, a reduction of approximately 60,000 square feet.*
 - (b) The proposed use is a reasonable one. Yes, the planned 5 lot residential housing project is consistent with the neighborhood uses and underlying zoning. This is variance allows for five (5) homes only. All requirements for the cluster zoning will be complied with. The green space that has been proposed is to be established for perpetual preservation. This project will require Planning Board approval and must be compliant with the Shore Land Protection Act.*

The motion was seconded and carried by majority vote.
(4) Yes - (1) No



Andy Cay
Vice Chairman
Zoning Board of Adjustment

Date: 1 - 16 - 14

NOTE: Any person affected has a right to appeal this decision. If you wish to appeal, you must act within thirty days of the date of this decision. The necessary first step, before any appeal may be taken to the courts, is to apply to the Board of Adjustment for a rehearing. The motion for rehearing must set forth all the grounds on which you will base your appeal. See New Hampshire Statutes, RSA Chapter 677